

WHAT IS CLAIMED IS:

1. An apparatus for detecting a connection state between a stereo earphone plug and a corresponding jack of a mobile communication terminal, comprising:
 - 5 an earphone jack having two terminals which are disconnected from each other when an earphone plug is inserted into the jack;
 - a switching unit connected to one of the two terminals, and driven when the two terminals are connected to each other;
 - a comparator connected to the switching unit, for generating a first state
10 signal when the switching unit is driven, and generating a second state signal when the switching unit is not driven; and
 - a controller for receiving the first or second state signal from the comparator, and determining whether the earphone plug is connected to the earphone jack according to the first or second state signal.
- 15 2. The apparatus as set forth in claim 1, wherein the switching unit is an NMOSFET (NMOS Field Effect Transistor) which is turned on when the two terminals are connected to each other, and which thereby connects a non-inverting terminal of the comparator to a ground terminal.
- 20 3. The apparatus as set forth in claim 2, wherein the NMOSFET is turned on by a pull-up resistor when the earphone plug is not connected to the jack, said pull-up resistor connected to a first terminal of the two terminals, and said first terminal not connected to the NMOSFET.

4. The apparatus as set forth in claim 2, wherein the NMOSFET is turned off by a pull-down resistor when the earphone plug is connected to the jack, said pull-down resistor connected to the NMOSFET.

5 5. The apparatus as set forth in claim 3, wherein when the NMOSFET is turned on, the controller receives the first state signal and determines that the earphone plug is not connected to the earphone jack.

10 6. The apparatus as set forth in claim 4, wherein when the NMOSFET is turned off, the controller receives the second state signal and determines that the earphone plug is connected to the earphone jack.